

Socio-Economic Impacts of State Tax Policy: A Case Study of the Nebraska Gas Tax

Dr. Peter Evangelakis, Vice President of Economics & Consulting Regional Economic Models, Inc.



Introduction		
Case Study		
Methods		
Results		
Conclusions		
Q&A		



Guiding Questions

- Many different stakeholders in the economy
- Wealth and income levels linked to race, gender, geography (rural vs urban), education
- Do policies benefit all income levels?
- Do they increase or reduce income inequality?
- Do all racial and ethnic groups benefit from policies?
- Are we benefiting or disadvantaging those without higher education?

Examples

- Examples of taxes where SEI considerations are involved:
- Goods tax vs services tax
- Flat tax vs progressive tax
- Capital gains vs income tax
- Tax expenditures: who benefits for political reasons
- Will be looking at SEI impacts of an excise tax in Nebraska

Is everybody getting a fair shot at the "American dream"?



Methods	Case Study Methods Results
	Methods Results
	Methods Results Conclusions
Results	
	Conclusions

Case Study

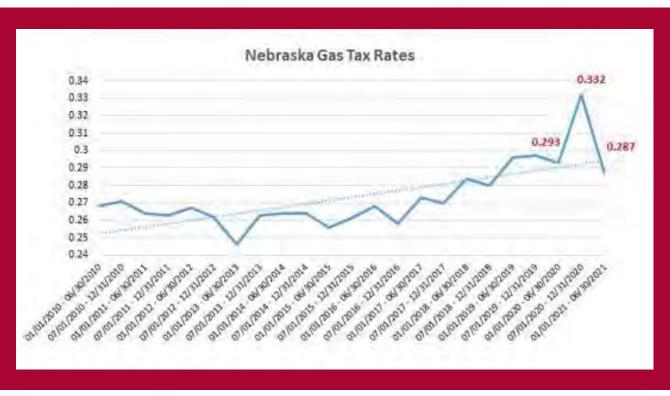


State of Nebraska's COVID-Induced Temporary Gas Tax Increase

- NE DOT raised state gas tax during 7/1-12/31/2020 to support falling revenues due to COVID-induced drop in gas prices and demand
- Variable tax part of state law triggered to keep revenues in balance with the roads budget
- Nebraska's gas tax is based on:
 (1) A fixed rate set by the state legislature

(2) A wholesale tax rate dependent on the price of fuel

(3) A variable tax rate to pay for transportation spending budgeted by legislature



 Driving patterns returned more to normal in summer
 2021, which the current gas tax level reflects

 Current legislation on gas tax, LB329, proposes minimum taxable price of gasoline to be \$2.42

 Intended to increase state government revenues in response to COVID-related economic slowdowns, including sharply falling gas prices and decreased economic activity

- Bill remains in committee



	Introduction	
1		
	Case Study	
l		
	Methods	
l		
	Results	
1		
	Conclusions	
l		
	Q&A	





- Model
 REMI Tax-PI/SEI model of Nebraska
- Scenario

COVID drove up Nebraska's gas tax to a record high

• Input

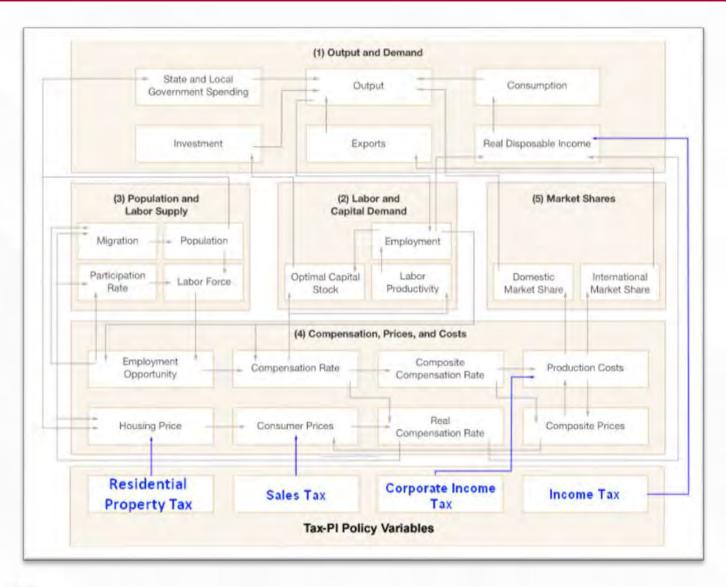
Increase Nebraska gas tax rate from 0.293 to 0.332

Period

```
July 1, 2020 – Dec 31, 2020
```

Model Overview: REMI Tax-PI/SEI





Socio-Economic Indicators





Compensation distribution

Ê

Employment and price changes by earnings quintile



Employment changes by racial/ethnic category and gender



Employment changes by educational attainment level



Introduction	
Case Study	
Methods	
Results	
Results	
Results Conclusions	



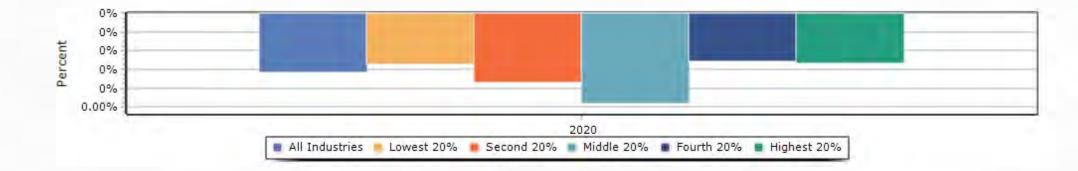
Economic Impacts		
Results Variable	Unit	2020
Total Employment	Individuals (Jobs)	-172
Gross Domestic Product	Millions of Current Dollars	-13.7
Output	Millions of Current Dollars	-23.2
Personal Income	Millions of Current Dollars	-10.5
Disposable Personal Income	Millions of Current Dollars	-9.2
Real Disposable Personal Income	Percent	-0.009%
Real Disposable Personal Income per Capita	Percent	-0.002%
PCE-Price Index	Percent	0.032%



Unit	FY2021
Thousands of Current Dollars	24,681.0
Thousands of Current Dollars	25,053.0
Thousands of Current Dollars	-116.0
Thousands of Current Dollars	-198.0
Thousands of Current Dollars	-30.0
Thousands of Current Dollars	-28.0
	Thousands of Current Dollars Thousands of Current Dollars Thousands of Current Dollars Thousands of Current Dollars Thousands of Current Dollars

Results: SEI, Compensation Rate (Weighted by Baseline Employment)





Compensation Rate (Weighted by Baseline Employment)

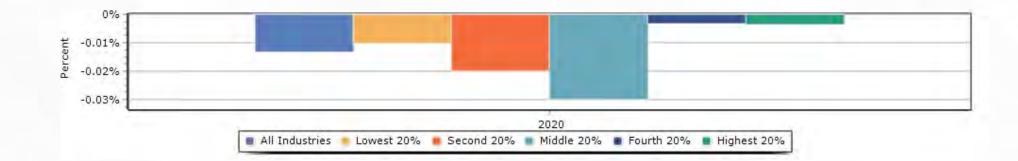
Industry	Units	2020
All Industries	Percent	-0.00063%
Lowest 20%	Percent	-0.00055%
Second 20%	Percent	-0.00074%
Middle 20%	Percent	-0.00096%
Fourth 20%	Percent	-0.00052%
Highest 20%	Percent	-0.00053%

Compensation Inequality Coefficient

Region	Unit	2020
Nebraska	Percent	0.001%

Results: SEI, Employment by Industry Quintile

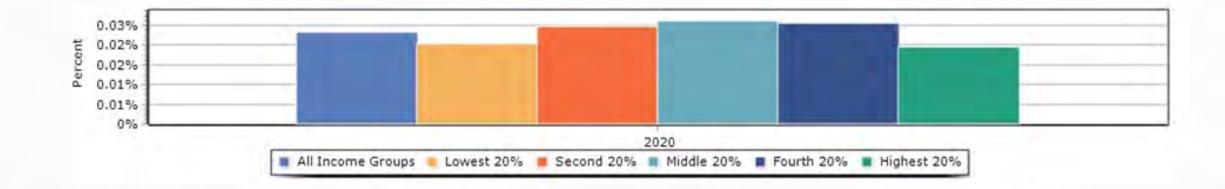




Employment by Industry Quintile			
Industry	Units	2020	
All Industries	Percent	-0.013%	
Lowest 20%	Percent	-0.010%	
Second 20%	Percent	-0.020%	
Middle 20%	Percent	-0.030%	
Fourth 20%	Percent	-0.003%	
Highest 20%	Percent	-0.004%	

Results: SEI, Consumption Price by Income Quintile

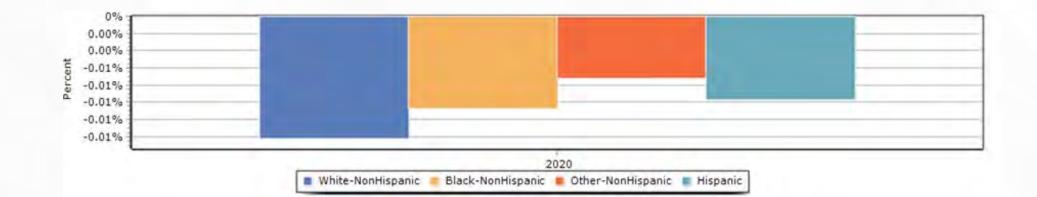




Consumption Price by Income Quintile			
Detail	Units	2020	
All Income Groups	Percent	0.023%	
Lowest 20%	Percent	0.020%	
Second 20%	Percent	0.025%	
Middle 20%	Percent	0.026%	
Fourth 20%	Percent	0.026%	
Highest 20%	Percent	0.019%	

Results: SEI, Employment by Race/Ethnicity

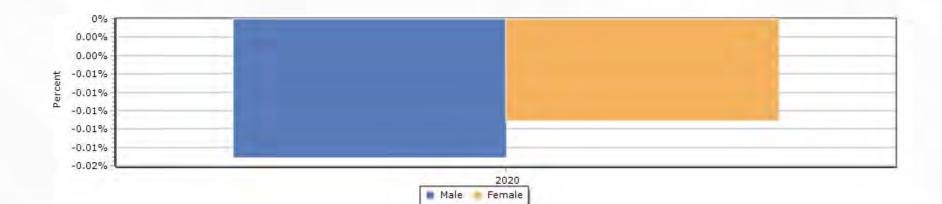




Employment by Race/Ethnicity			
Race	Units	2020	
White-NonHispanic	Individuals	-148	
Black-NonHispanic	Individuals	-6	
Other-NonHispanic	Individuals	-5	
Hispanic	Individuals	-14	

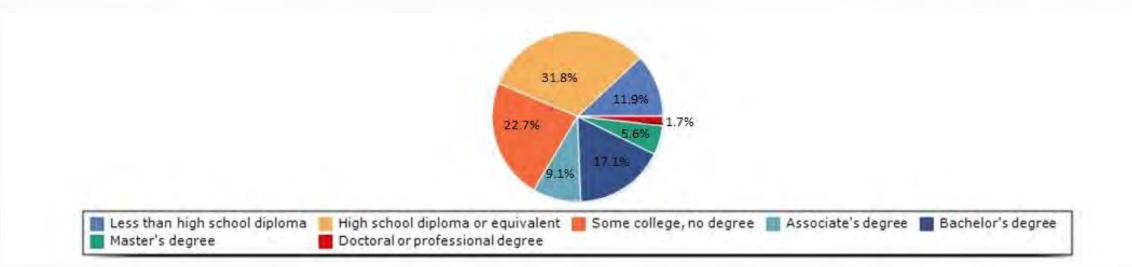
Results: SEI, Employment by Gender





Employment by Gender		
Gender	Units	2020
Male	Individuals	-105
Female	Individuals	-67

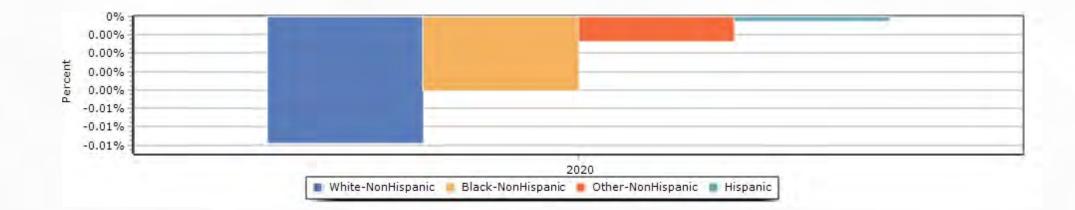
Results: SEI, Employment by Detailed Educational Attainment **REMI**



Employment b	y Detailed	Educational	Attainment
--------------	------------	-------------	------------

Category	Units	2020
Less than high school diploma	Individuals (Jobs)	-21
High school diploma or equivalent	Individuals (Jobs)	-55
Some college, no degree	Individuals (Jobs)	-39
Associate's degree	Individuals (Jobs)	-16
Bachelor's degree	Individuals (Jobs)	-30
Master's degree	Individuals (Jobs)	-10
Doctoral or professional degree	Individuals (Jobs)	-3

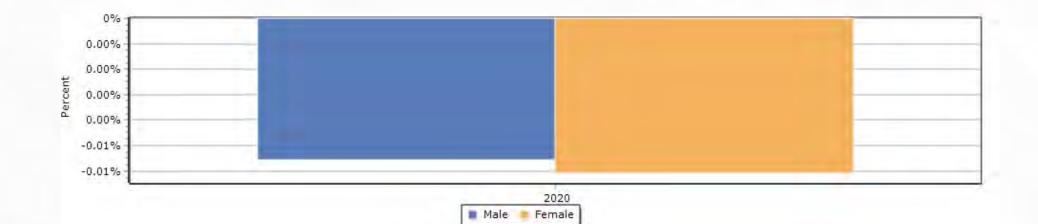
Results: SEI, Labor Force Participation Rate by Race/Ethnicity



Labor Force Participation Rate by Race/Ethnicity			
Race	Units	2020	
White-NonHispanic	Percent	-0.007%	
Black-NonHispanic	Percent	-0.004%	
Other-NonHispanic	Percent	-0.001%	
Hispanic	Percent	0.000%	

Results: SEI, Labor Force Participation Rate by Gender





Labor Force Participation Rate by Gender			
Gender	Units	2020	
Male	Percent	-0.0056%	
Female	Percent	-0.0061%	

Unemployment Rate		
Region	Unit	2020
Nebraska	Percent	0.017%



Introduction
Case Study
Methods
Results
Conclusions
Q&A



- Increase in Nebraska gas tax resulted in small losses to total employment, GDP, output, and personal income
- Recouped state revenues, with fairly minimal dynamic revenue losses

- Compensation rates were mildly affected
- Employment & compensation losses were relatively higher in the middle industry quintile
- Per capita income decreased, unemployment rate increased

- Consumption price index rose, driven by the higher gas prices
- Middle-income quintiles were relatively more impacted than lowest and highest quintiles
- Based on expenditure patterns by quintile

- Greatest employment losses to the white non-Hispanic & male demographic groups
- Individuals without university degrees experienced more job losses than those with higher degrees
- Labor force participation decreased relatively more for the white non-Hispanic group, with males and females seeing relatively even decreases





Thank you! Questions?

For more information, please contact Peter.Evangelakis@remi.com.